



Diagnostics for Design of Strategies of Production and Marketing of Honey Cosmetics

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Abstract: The objective of this research is to obtain a diagnosis with the application of tools that help to design production and commercialization strategies for a micro-enterprise of beekeepers that elaborates cosmetic products based on honey, which is located in the state of Tlaxcala, with the purpose to generate favorable profitability and strengthening as an organization. Three research techniques are used, such as the survey, which served to know the probable acceptance of the products, possible demand, main aspects in the purchase election, this information is used for the marketing strategy. The indepth interview and observation were also used to detect areas of opportunity in the process that is artisanal, this information supports the design of the production strategy. Some of the results obtained are: current size of the products not according to the needs of the consumer, are not in strategic points of sale, does not have a brand, however, if there is a high acceptance because it is of natural origin. In the process, there is no standardization in the key activities and there are no documentary records that lead to an inadequate administration of resources.

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1. Introduction:

The diagnostic investigation arises as a response to a situation or problem that needs to be analyzed to find a possible solution and then identify the characteristics of the context and determine the actions to be followed. Its objective is the analysis based on the observation of the scenario.

This type of research seeks to identify which factors intervene in a given scenario, in order to generate a global idea of the object of study, and thus allow decisions to be made based on that information collected and analyzed. Once the most relevant aspects of the study object have been identified, it allows to categorize the opportunities and order them according to the importance to propose a possible solution.

To do the research it is necessary to use instruments such as the survey, open interview, and observation that will give the information to be able to diagnose a microenterprise that requires the development of efficient strategies.

The problem that was necessary to make a diagnostic investigation arose from analyzing that Mexico is an excellent producer of honey, occupying the sixth place in production and the third place in exports, only in 2015 exported 45,000 tons of honey, with a value of 155 million dollars (INEGI, 2016), and from 70 to 80% of what was produced went to the external market, Germany values honey from Mexico and acquired 43% of the production

that it exports (SAGARPA,2015), but despite the international importance of honey, there is a problem of low profitability for beekeepers, because there is low internal consumption in the country, due to scarce diffusion towards the population of the benefits to health., honey is sold to intermediaries who set the price to the beekeeper and the sale value is kept constant and the price of the activity of the honey harvest increases year after year.

Beekeeping can be considered as a profitable business opportunity, seeking alternatives with added value and differentiated to strengthen and increase the internal consumption of honey, for example, differentiated products that can be cosmetics.

In the state of Tlaxcala there is a group of beekeepers, who market honey in two ways: at large volumes to intermediaries and the other way of marketing is locally in presentations of 1 L, ½ L. and ¼ L. However, the intermediaries are those who have a much wider profit margin than the producers and, consequently, low profitability in this activity. Therefore, this microenterprise sought to add value to honey through the development of cosmetics such as body cream and shampoo, which have been sold locally, and lack strategies focused on market knowledge and satisfaction of customers. customers.

The objective of this work is to develop research by means of instruments such as the survey, interview, and observation, to obtain a diagnosis of the micro-enterprise



of beekeepers in the production of honey-based cosmetics, and thus develop strategies for production and commercialization that generate a favorable profitability in benefit of the microenterprise.

The survey is very commonly used in market research, Hernández, Collado & Baptista (2010), says that must meet three essential requirements are validity, reliability, and objectivity.

The interview is the most used technique in the different areas of knowledge, being an interaction between two people, planned and that obeys an objective (Bernal Torrez, 2010).

For the observation, Bernal Torrez (2010), mentions that it is a scientific research technique and is a rigorous process that allows to know directly, the object of study and then describes and analyze situations about the studied reality, through the type of natural observation where the observer is a mere spectator of the observed situation; therefore, there is no intervention of this in the course of events.

Many authors have delved into the topic of strategy design, from the definition of strategic management that David (2008) handles, as well as the art and science of formulating, implementing and evaluating multifunctional decisions that allow an organization to achieve his objectives.

As Thompson and Strickland (2001) mention, an organization's strategy is about the action plan for the company to move towards an attractive business position and develop a sustainable competitive advantage.

For the design of the strategy it is important to do an internal and external review of the organization, based on the data obtained to have a clearer idea of the most important areas to focus on in order to set the goals, objectives and strategies It is the how and what a company will do to achieve them.

Making a strategy raises the possibility of success and growth. It is important to investigate and analyze the market, competition, and trends, which will provide us with the bases and tools to generate a long-range vision.

2. Methodology:

The study was framed as a quantitative research, with a non-experimental design, being a cross-sectional investigation of descriptive and field type, where the aspects relating to the group of beekeepers belonging to the state of Tlaxcala were analyzed and identified.

2.1. Research Instruments:

Three techniques were applied through three instruments: the survey, the in-depth interview, and the observation.

For the survey, a new research instrument was designed, which met the validation, reliability, and objectivity, to be applied through a questionnaire aimed at potential customers in order to know the acceptance of cosmetic products based on honey such as cream. body and shampoo, the possible demand, aspects of purchase choice and main competitors among others, this instrument was constructed in a written format with 16 questions, being: 4 Likert scale, 1 dichotomous, 9 policotomicas, 2 open and 5 items for Obtain demographic information such as age, educational level, income level, place of residence and occupation.

This instrument was applied in the state of Tlaxcala, the sample size is 139 inhabitants, being a probabilistic type sample since all the elements have the same possibility of being chosen, this sample is also defined as stratified probabilistic. The market segment to which it was applied was to women and men 18 years and older from the state of Tlaxcala.

This subgroup was defined by segments and a sample was selected for each one, with the purpose of comparing municipalities selecting from the 5 with the highest population density, in addition it was considered that they had more shopping centers, supermarkets, where people most frequently make purchases. of cosmetic products such as shampoo and body cream, there is also a spa, where natural products are consumed, these places are more concentrated in these municipalities (INEGI, 2017), as shown in Figure 1.

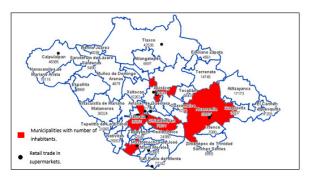


Figure 1. Selected municipalities of the state of Tlaxcala, with greater population density and location of shopping centers.

For the interview, an in-depth interview guide was designed for the micro-entrepreneurs of the group of beekeepers of 21 open questions, that is, they naturally answer according to what they are asked, and the information is collected, these questions are to know the real situation of the microenterprise regarding the production of cosmetic products.

For the observation natural observation was used, where the observer is a mere spectator of the situation analyzed; therefore, there is no intervention of this in the course of events, that is, it allows to know directly the object of study and then describe and analyze situations about the studied reality, for this instrument a checklist was built that was applied to the productive processes in the elaboration of the cosmetic products, designed with 14



items with option to dichotomous response and with observation section which was filled by the researcher through visits to the microenterprise applied to the productive processes.

2.2. Data analysis:

For the survey, the data obtained from the population under study were processed using statistical tools. In this study, excel was used for descriptive statistics using frequency distribution and graphic representations (histograms and bar and pie charts).

In the case of qualitative techniques such as the indepth interview, the information obtained is analyzed from what the microentrepreneurs answered; all the registered information is examined and ordered to build interpretations and descriptions to build solid arguments and obtain the most relevant information for the interests of the investigation.

With the technique of observation through the check-list, the information obtained was analyzed the items where the answer is affirmative, considering it as a strength and in the negative responses as weakness, conclusions were drawn taking into account the observations section to make a small report.

3. Results:

3.1. Survey Instrument:

The survey applied to the market segment gave the following results in terms of demographic information:

Of the respondents 76% were female and 24% male, there was a higher proportion of women, because there is a more favorable trend to make purchases of cosmetic products, however, man today is more interested in their physical well-being in more frequent use of personal care products.

There is greater participation in the segment of 15 to 25 years with 44%, the survey is aimed more at young people than people over 50, are more physically active, have a greater interest in choosing their cosmetic products, go to centers commercial and parks more frequently, strategic points of application of the survey.

In order to study the demand and the aspects in the purchase election of the clients, the following items that are part of the survey are presented, and 139 persons responded from the delimited market segment.

The preference of shampoo brands, preference is given to the brand Pantene with 35% followed by caprice 24% later, head shoulders with 17% and other brands occupied 13%.

In body cream they prefer the Dove brand with 27%, followed by nívea with 22%, hinds with 20%, and lubridrem with 17%, 13% buy other brands.

In both products, there is not a dominant percentage between the preference of brands, the choice of people is very varied, there is no leading brand. Another item that was asked was about the place of purchase, 46% of respondents buy cosmetic products more frequently in supermarkets, continuing with local stores with 34% followed by pharmacies with 11% although, there is also another channel of sale that is through direct sales with promoters occupying 9%.

The advertising medium where the people surveyed have greater knowledge of cosmetic products is through television with 53%, however, it is a medium with high cost, secondly, it is by recommendation with 24%, ie People also choose their products, for the information they receive from family and friends, the option of the internet is 17%, being of great influence and relevance in the population.

In shampoo, 40% of the respondents commented that quarterly consume 2 pza. In body cream, 53% of respondents mention that quarterly consume 1 pza. 70% comment that they buy shampoo with a size of 700 ml (the content varies by brand between 50ml to 100ml), people inclined for the largest presentation, probably for price convenience as in body cream, 53% of the respondent's comment that they acquire the size of 400 ml.

In shampoo, 46% of people say they pay \$ 30 MXN to \$ 50 MXN per piece of product, this is the cost that mostly you chose in the survey.

In cream, 46% of people comment that they pay from \$ 30 MXN to \$ 50 MXN per piece of product. this is the cost that mostly you chose in the survey.

An item was formulated to know the probable acceptance of honey-based cosmetic products, where 72% would like to try a new product that provides other benefits against 28% that would not like to try or are undecided, being mainly men who do not show interest in honey-based cosmetic products, these results are displayed in Figure 2.

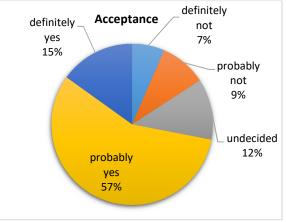


Figure 2. Acceptance of honey-based cosmetic product.

There is an article in which they are asked: Did you use cosmetic products based on honey or another derived ingredient such as propolis, royal jelly, and wax? 54% of the surveyed population says they have not used any cosmetic product based on honey, which reflects that the



benefits of honey are not disseminated, so the consumption of products made with honey such as cosmetics has not been positioned despite the fact that these are natural or not found inaccessible places of purchase, so an appropriate marketing strategy is required.

Respondents were also asked about their knowledge that cosmetic products with natural ingredients such as honey have antioxidant, antibacterial properties, provide nutrients and are good exfoliants and have the following results: 73% of the population, if you have any knowledge of the benefits of honey and 27% do not have it, this percentage is important, because they acquire commercial brands that may not provide as many benefits as honey products and because they are probably not available. products in their usual place of purchase, as shown in Figure 3.

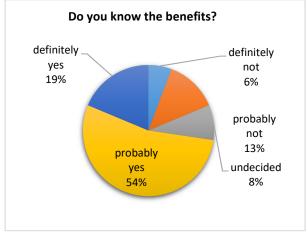


Figure 3. Knowledge of the benefits of honey.

It was investigated on the place of purchase of cosmetic products based on honey, 53% of people say they have not bought this type of products, on the other hand those who have bought mention that they do it in health food stores 21%, in supermarkets 15%, in pharmacies 7% and 4% in other places, although a large percentage knows about the health benefits of honey, few people consume them, because they are not available in the main points of sale more positioned commercially as supermarkets.

They were asked if they would like to try a product with the aroma of honey, aloe, and oats, which are the ingredients with which these products are made, 87% of people would like to try a product with a honey aroma and 13% say they would not like to try or are undecided.

3.2. Open interview:

A field investigation is carried out through an interview with the group of beekeepers to obtain information of the present study regarding productive processes of the products based on honey, the survey was done with one of the entrepreneurs of said organization that the production of cosmetics. When talking with staff of the microenterprise, it is seen that there are several areas of opportunity, although they have entrepreneurial initiatives in adding a differentiated value to honey through their products, there have been obstacles such as obtaining a commercial brand

that differentiates between the products, as well as a design

that differentiates and identifies the products. They have the necessary information on the development of cosmetic products and look for ways to investigate more about new products to be able to produce them, but they have not documented the procedures of the elaboration of current products, they lack controls on the raw material as for consumption, costs, and purchase, there is not a history of monthly sales, the exact cost of manufacturing of products, supplies, labor, etc. is not known.

Lack of information to know what the real productivity in the organization and other items such is as efficiency, production capacity, and profitability.

As for the marketing they participate in sales of honey products fairs exhibitions and has a commercial and home sales, promotion with Facebook, free samples are given as part of the advertising that has worked for promotion and to publicize the products, they have also had new customers by recommendation of regular customers.

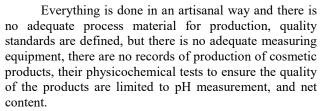
Their productivity has not increased because they have not been able to position their products in more strategic places because they do not have a brand that identifies them and is required to enter shopping centers, they are made by hand because they do not have semiautomated machinery that helps increase productivity., Sometimes having difficulty to cover the demand for product or having excess product in storage due to lack of sales.

3.3. Observation (check-list):

This research instrument was applied in the productive processes, during this process of observation in the micro-enterprise of beekeepers, focusing on the standardization of processes, conditions of facilities, equipment materials, production procedures, methods, knowledge, and skills.

It is visualized that the way in which the products are elaborated is standardized, by doing so different impacts on the quality of the final product, however, the processes of the production of cosmetic products based on honey are not documented.

There is an area destined for the elaboration of cosmetic products in the ship for honey processing, which was built for the purpose of being certified as a safe company, but it has not been possible to adequately condition it, so the elaboration of products is carried out in the current honey processing area at the home of beekeepers.



There is no identification with code to the product, there is no control of inventories of raw materials or cosmetic products based on honey, there is no control of monthly registration of finished products or monthly sales.

4. Discussions:

At the beginning of this work, it is established to present the research for the design of strategies of production and commercialization of honey cosmetics, with the purpose of being able to generate profitability in the group of beekeepers of the state of Tlaxcala.

In the research process, the survey technique has been used to obtain information through the descriptive statistics on the objective of the study, which is market research, through a survey of potential clients to know the acceptance of cosmetic products based on of honey, showing that 72% of people would like to try them because 73% of people say they know the benefits of honey and 87% of respondents like products with honey aroma and/or natural essences.

The preference of people is for large sizes, in the case of 700 ml shampoo and 400 ml body cream probably because it is more convenient for price and performance.

There is not a dominant percentage of the preference of brands, the choice of people is very varied, there is no leading brand, which indicates that there is a possibility of entering the market.

The most frequent place of purchase are supermarkets with a 46% preference being the main strategic point of sale and in smaller percentages pharmacies and local stores.

The advertising medium where consumers know their products is a television with 53%, although 17% of people use the Internet, being an economic means to promote small business products.

Information was also obtained such as product costs, the frequency of purchase, the quantity of purchase, which is used to calculate the probable demand for the products and to know the price of competitors and based on this being able to set a more competitive price that is profitable for the microenterprise. and attractive to the customer. 53% of people have never used a cosmetic product based on honey probably because they are not in strategic points of sale because the main point of sale of these products is the health food stores.

In addition, the in-depth interview technique was applied to the company's micro-entrepreneurs and the observation technique was applied through a check-list to the honey-based cosmetic production processes, in order to obtain a diagnosis of how it is currently working. and to be able to define a production strategy to satisfy the probable demand through the definition of a model that is adapted to the microenterprise to describe specific actions that can be carried out and the microenterprise is more competitive in the labor market.

Mainly these instruments showed that there is a lack of documentary sales controls, raw material costs, inventories, the standard procedure of operation of the products and real profitability of the handmade process that is used.

On the other hand, there is no innovative and attractive packaging design or a brand that identifies the products.

On the other hand, the personnel that works with cosmetic products are very keen on entrepreneurship, experience in the use and handling of honey, knowledge of good manufacturing practices, and there is self-training to improve their activities.

It is important to mention that diagnostic research is the predecessor for the design of production and marketing strategies, whose purpose is to generate a profitability in the group of beekeepers and the organization progress towards an attractive business position and develop a sustainable competitive advantage.

As future work, based on the diagnosis obtained, it will serve to continue with the development of strategies for beekeepers' microenterprises in the state of Tlaxcala.

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